



**MISSOURI DEPARTMENT OF TRANSPORTATION**  
**ADULT 13 - PASSENGER CENTER AISLE VAN**

1. The intent of these specifications is to describe a standard width type vehicle that will be modified, and assembled by using best quality materials, components and workmanship in accordance with sound engineering principles and manufacturing practices to provide safe and reliable highway and city transportation for ambulatory adult passengers.

**SHODDY AND INFERIOR QUALITY MATERIALS AND**  
**WORKMANSHIP WILL NOT BE ACCEPTABLE.**

MoDOT reserves the right to conduct in-plant inspections.

2. Acceptable Makes and Models:

2007 or 2008 Chevrolet or GMC model 30 or G3500 extended van with 155" wheelbase.

2007 or 2008 Model Ford E350 Cargo or Window Super Van with 138" wheelbase.

60% domestic content, final assembly point in USA.

Or approved equal.

If a 2007 Model cannot be supplied, then a 2008 Model must be supplied at the quoted bid price. This will only be exercised in the event the successful bidder receives a purchase order in time to order a vehicle and fails to do so.

3. GVW Rating, Minimum 9,000 lbs.
4. Body, Exterior: Shall have manufacturers standard items for the grill, grill frame, hubcaps, moldings around windows, doors, lamps, etc.
5. Body, Interior: Standard comfort and convenience items. They shall be all manufacturers standard items and equipment, plus all additions or substitutions listed. If special option package is required with minor items not specified, include in your bid price. Read carefully do not deviate.

Lighting - Manufacturer's standard.

Headliner or Ceiling - Shall be full length for driver and passenger area. This headliner shall have longitudinal and cross member supports where needed to prevent flexing and vibrations. The supports shall not be visible from the interior.

Paneling and Trim - To be complete on all doors, walls, ends and corners. If aftermarket paneling and trim is to be used it will look as good as factory original, but will have to meet FMVSS 302 for flammability.

Floor and Floor Coverings - The entire floor except driver's are to be made level from end to end and side-to-side with plywood a minimum of 1/2" thick securely placed over the metal floor by glue,

screws or a combination of methods that will assure a permanent fitted floor.

The floor shall be covered with a minimum of 2.2 mm thick, vinyl transit type floor covering. All seams will be heat welded to provide a waterproof seal (when joining two similar surfaces). Rear wheel housings will have carpet or other sound deadening material installed on them.

All flooring will be anti-skid throughout.

All exposed edges around the wall, doors and entranceways shall be trimmed with a metal or ABS molding securely screwed or glued in place. The driver area shall have insulated floor covering and mat.

For the benefit of sight-impaired passengers, the floor covering color shall be contrasting to the vehicle interior, including seat-covering material.

Insulation - The entire interior dash firewall, engine cover, lower panels, doors, floor, sidewalls, ceiling, headliner, etc. shall be insulated with 1" fiberglass. Insulation shall be 1" thick fiberglass. OEM insulation is also acceptable.

Insulation must be completely enclosed by the ceiling, wall panels, window moldings, etc.

Scuff Pad - Side step sill, full length for front driver entrance.

Grab Rails and Stanchions - A floor to ceiling stanchion shall be installed near the aisle and immediately left of the RH front passenger door. This stanchion shall be connected to the vehicle right hand sidewall by a guardrail. This panel shall be padded on the side facing the passenger seating positions.

An upright type stanchion shall be installed from the floor to the ceiling at the right of the cargo entrance doors, within easy reach of boarding passengers. This stanchion shall provide passenger assist.

There will be an exterior grab handle securely mounted to the left door pillar on the drivers entrance door and one on the outside of the passenger door. Approximate length to be 6".

Stanchions shall be securely attached to the ceiling and floor with four screws at each location. The stanchions and guard rail shall be tubular, bright finish metal, covered and durable, premolded, high-density energy absorbing padding.

Certification - All materials including insulation used in the van conversion interior shall be the latest fire resistant type that meets or exceeds all State and Federal requirements on the date of manufacture. A certification shall be fixed to the vehicle plainly visible.

6. Seats, Seating Arrangement and Seat Belts: This arrangement shall provide seating as listed below and shown on the appropriate exhibit. (See Exhibits I) Ford Motor Co., standard factory center aisle will be acceptable provided it meets all of the specifications.

The driver's seat shall be a power adjustable high back bucket type with cloth covered full depth foam padded seat cushion and backrest. This seat will have a folding armrest on the RH side.

**Exhibit I** - This floor plan will provide seating for 13 adults as shown on Exhibit I. This vehicle will retain the manufacturer's standard RH door and roof.

The two-passenger seats shall be a minimum width of 36", the one-passenger seats shall be a minimum width of 18".

All seats shall be a minimum depth of 16", the backrests shall be a minimum depth of 2".

On all vans there will be handholds on the upper top edge of the aisle side of the passenger seats and armrests folding on the aisle sides of the forward facing seats. All handholds will be padded. (No notched corners) Seats will meet all aspects of FMVSS 210. Include testing certification with bid.

All seat cushions and backrests shall be covered with HD (Level 3) vinyl material. Seat cushions and backrests shall have full depth foam padding. The seat cushion padding shall have a density (4" minimum) sufficient to support occupants without bottoming. Clear plastic seat covers are acceptable for OEM driver's and co-pilot seat.

All seat frames will be painted or powder coated to prevent corrosion.

Seats will be placed to allow adequate shoulder room for passengers sitting next wall. The walk-through aisle between right and left hand seats shall be a minimum of 10".

Seat spacing shall be a minimum of 30" centers and/or 27" hip to knee room, providing adequate adult knee room.

Fixed seats shall be a Braun Model 117, Freedman Low Back, C. E. White Model L-35-LB, American Seating or approved equal (Ford factory seats will be acceptable). The driver and all passenger-seating positions shall have best quality seat belts properly located and easily accessible. The driver and all passenger seating positions shall have equal length, two-piece belts and retractors with a minimum usable extension of 80", adequate to encircle and secure at the hips from the smallest to the largest size passenger that will be expected to use the belt, regardless of where the belts are anchored. Shoulder harnesses are required for all outboard passenger seats. All front seats shall be designated as priority seating. Belt length will be measured bolt to bolt.

**Floor Plan I** - Will have one integrated child seat that will safety accommodate children between 20 and 60 lbs. This seat will be of a fixed two-passenger design and will be located at the rear of the vehicle. Freedman ICS, American ICS or approved equal will be acceptable.

**Floor Plan I** - Will have at least three seating positions meet the FMVSS 225 latch system requirement for child safety seats. They may be located on either fixed seats, or folding seats and must be designated safety seat locations. The preferred location of these positions will be on the aisle side of two-passenger seats. Slight variations of seating arrangements are acceptable as long as capacity remains 13.

7. **Roof** - Manufacturer's standard.

8. **Chassis and Options** -

**Wheelbase** - 138" approximate minimum.

Alternator - Manufacturer standard 120 amp minimum.

Axle, rear - 4.10 ratio (approximate).

Battery - Manufacturer's Standard.

Brakes – Power.

Engine - 240 hp, V8 minimum.

Mirrors - Exterior dual.

Fuel Tank - Approximate 30 gallon capacity.

Stabilizer Bar - Front.

Shock Absorbers - H.D. Standard, front and rear.

Steering - Power - Include tilt wheel and cruise control.

Tires - Five (5) tires, manufacturers standard for GVWR - all season radials. Not Firestone

Transmission - 4-speed automatic with overdrive.

Paint - Standard factory.

Glass - Dark sunscreen at all passenger positions.

Radio - AM - FM.

Rear Window Defroster or De-Fogger - (may require single rear door)

Heater/Air Conditioning - Front and rear with auxiliary heater, high capacity: Including headliner and insulation package and increased cooling, high output heater, dark sunscreen glass on all passenger windows, and any other equipment as required by manufacturer with air conditioning.

Trailer Towing Package - automatic auxiliary transmission oil cooler, and handling package and any other equipment as required by manufacturer to complete this option. The hitch and wiring harness may be deleted.

Warranty Terms - 3 years or 36,000 miles on parts and labor.

9. Safety Equipment - New unit(s) to have all the latest standard safety equipment required by law and regulations.

This equipment shall include a 5 pound 10 BC Class fire extinguisher, an emergency seat belt cutter, a standard size 16 unit first aid kit containing an assortment of bandages and medications suitable for the care of minor cuts, burns, three reflective bi-directional triangles, and three LED lights (Tri Alert or approved equal) of which are securely mounted in the driver's area. Also, include an assortment of spare fuses used in the vehicle chassis electrical system and a jack with all tire changing equipment. An emergency seat belt cutter will be mounted in driver's area.

Each vehicle will have a blood borne disease kit including the following ten (10) items. latex gloves, CPR mask, goggles, apron, disinfectant wipes, absorbent and scoop, I.D. tag and red plastic bag. All first-aid and bloodborne disease kits will be packaged in durable metal or hard plastic cases.

Each vehicle will be equipped with a reverse alarm and an exterior 8" diameter convex mirror located on the left rear corner of the van.

A detailed drawing, showing interior floor plan and seating arrangements shall be included.

No vehicle will be used to tow a chase vehicle.

A guarantee that the chassis manufacturer's warranty will be in affect at the time of delivery and acceptance, regardless of odometer reading or date of original purchase by supplier.

Running Boards – Vehicle will be equipped with (1) 8" wide by 36" long aluminum running board mounted at the drivers door location. It will be a minimum of 1/8" thick and will have a diamond embossed or other anti-slip design on the footing area. This running board will be securely mounted with at least 3 braces that will be made of galvanized steel to resist rust. Running boards will be covered with expanded metal to reduce slipping. Diamond embossed only will not be acceptable.

The second running board will be located directly under the RH side cargo doors. It will be 8" wide and approximate 92" long. It will utilize (8) eight braces and will meet the same structural standards as the driver's side running board. This side will be used for passenger boarding assistance. The running board will be covered with expanded metal to reduce slipping. Diamond embossed only will not be acceptable.

10. Include on all vehicles as an option. Safety Vision SV 5000, Backing Vision 1350, Intermotive Hawkeye HRAS401-A (or approved equal) Backing Vision System.